

IN THE CLAIMS:

The claims are as follows:

Claims 1-17 (Cancelled)

18. (Currently amended) A method for determining a connecting path in a communication network, comprising the steps of:

— in a first step, determining whether a suitable connecting path to a requested destination node of the communication network is already stored in a second memory;

when, in the first step, a suitable, stored connecting path has not yet been identified in the second memory, in a second step determining a suitable connecting path to the requested destination node on the basis of stored network data in a first memory that describe the communication network, and storing the connecting path in the second memory, so that it is available for a new determination of a connecting path in the first step; and

in a third step, communicating path information corresponding to the connecting path determined in the first or second steps to network nodes that are a component part of the determined connecting path in order to set up the determined connecting path to the requested destination node.

19. (Previously amended) A method according to claim 18 wherein a connecting path to the requested destination node is considered as a suitable connecting path in the first or the second step when the corresponding connecting path leads from an originating node of the communication network to the requested destination node and specific transmission properties for a data transmission to the destination node are met.

20. (Previously amended) The method according to claim 18 wherein a plurality of standard connecting paths to specific network nodes of the communication network are permanently stored in advance, these being checked in the first step together with the connecting path previously determined and stored according to the second step.

21. (Previously amended) The method according to claim 18 wherein only a specific, maximum plurality of determined connecting paths are stored in the second step.

22. (Previously amended) The method according to claim 21 wherein given determination of a new, suitable connecting path in the second step, the connecting path previously stored longest according to the second step is erased when a plurality of connecting paths that corresponds to the maximum plurality has already been previously determined and stored according to the second step.

23. (Previously amended) The method according to claim 21 wherein given determination of a new, suitable connecting path in the second step, the connecting path previously stored according to the second step and used least according to the third step is erased when a plurality of connecting paths that corresponds to the maximum plurality has already been previously determined and stored according to the second step.

24. (Previously amended) The method according to claim 21 wherein the maximum plurality of the connecting paths that can be stored according to the second step is variable.

25. (Previously amended) The method according to claim 24 wherein the plurality of overflow cases is counted wherein a new connecting path has been determined according to the second step and is to be stored even though a plurality of connecting paths that corresponds to the maximum plurality has already been previously determined and stored according to the second step; and in that the maximum plurality of connecting paths that can be stored according to the second step is set dependent on the number of overflow cases.

26. (Previously amended) The method according to claim 24 wherein when a new connecting path has been determined according to the second step and is to be stored even though a plurality of connecting paths that corresponds to the maximum plurality has already been previously determined and stored according to the second step, the maximum plurality of connecting paths that can be stored according to the second step is raised for a specific time span and is in turn reset after the expiration of the specific time span.

27. (Previously amended) The method according to claim 18 wherein the first through third steps are automatically implemented by a control unit in a switching equipment that forms a network node of the communication network.

28. (Previously amended) A switching equipment for determining a connecting path in a communication network, comprising:

a plurality of line units respectively connected to at least one terminal equipment or to at least one further switching equipment;

a first memory for storing network data that describe the communication network;

a second memory for storing connecting paths that connect the switching equipment to specific destination switching equipment of the communication network;

a control unit that, upon reception of a connection inquiry via one of the line units for a connection to a requested destination switching equipment of the communication network, searches the second memory for a suitable connecting path to the requested destination switching equipment and, when it does not find a suitable connecting path in the second memory, determines a suitable connecting path to the requested destination switching equipment on the basis of the network data stored in the first memory and stores it in the second memory;

the control unit, after determining a suitable connecting path stored in the second memory or determining a suitable connecting path based on the network data stored in the first memory, communicates information corresponding to the suitable connecting path via a corresponding line unit to further switching equipment that are a component part of the suitable connecting path to the requested destination switching equipment in order to set up the connecting path to the requested destination switching equipment.

29. (Previously amended) The switching equipment according to claim 28 wherein a third memory is provided in which a plurality of standard connecting paths to specific destination switching equipment of the communication network are permanently stored,

as a result of a connection inquiry for a connection to a requested destination switching equipment, the control unit searches the third memory together with the second memory for a suitable connecting path to the requested destination switching equipment.

30. (Previously amended) The switching equipment according to claim 28 wherein the control unit monitors the plurality of connecting paths stored in the second memory with respect to a specific, maximum plurality.

31. (Previously amended) The switching equipment according to claim 30 wherein after determining a new, suitable connecting path on the basis of the network data stored in the first memory, the control unit erases the connecting path previously stored longest in the second memory in case the control unit finds that a plurality of connecting corresponding to the maximum plurality has already been stored in the second memory.

32. (Previously amended) The switching equipment according to claim 30 wherein a counting unit for counting a frequency of employment of each connecting path stored in the second memory for a connection setup to a respectively requested destination switching equipment of the communication network,

whereby, after determining a new, suitable connecting path on the basis of the network data stored in the first memory, the control unit erases the connecting path previously stored in the second memory that is employed least in case the control unit finds that a plurality of connecting paths corresponding to the maximum plurality has already been stored in the second memory.

33. (Previously amended) The switching equipment according to claim 30 including a counting unit for counting overflow cases of the second memory wherein, after determining a new connecting path on the basis of the network data stored in the first memory, this is to be stored in the second memory even though a plurality of connecting paths corresponding to the maximum plurality has already been previously stored in the second memory, whereby the control unit sets the maximum plurality of connecting paths stored in the second memory dependent on the acquired plurality of overflow cases.

34. (Previously amended) The switching equipment according to claim 30 wherein after determining a new connecting path on the basis of the network data stored in the first memory and before storing the determined connecting path in the second memory, the control unit temporarily increases the maximum plurality of connecting paths that can be stored in the second memory when the control unit finds that a plurality of connecting paths corresponding to the maximum plurality has already been previously stored in the second memory.

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